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Ryoji Hayashi

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EXAMINER

GEBREMICHAEL, BRUK A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/524,305	Applicant(s) HAYASHI, RYOJI	
	Examiner BRUK A. GEBREMICHAEL	Art Unit 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-10, 12-16 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/29/2008 has been entered.
2. Currently, claims 1, 10, 12-14 and 20 have been amended. Claims 4, 11, and 17-19 have been cancelled.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton 5,888,135.

Regarding claim 10, Barton teaches the following claimed limitations, a movable machine moved by a control signal supplied from a transmitter, which is combined with the movable machine on the basis of first identification information (col.5, lines 53-65), the movable machine comprising, a storage device for storing characteristic information

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including second identification information for specifying the movable machine itself (FIG 3, labels 124/126), a discrimination device responsive to transmission of second identification information for specifying a movable machine to be controlled from the transmitter (FIG 4, labels 128-132), the discrimination device determining whether remote control conducted by the transmitter that has transmitted the second identification information is allowed, on the basis of the received second identification information and the second identification information stored in the own storage device (col.10, lines 19-30); and a remote control prohibition device responsive to discrimination that the remote control is not allowed, for prohibiting the remote control by the transmitter that has transmitted the second identification information, irrespective of whether a combination based on the first identification information is established (col.10, lines 12-16).

Note that regarding storing the second identification information in the movable machine's own storage device, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to recognize the fact that the second identification information of the vehicle is stored in the vehicle's memory, and the vehicle would respond to a transmitter that transmits a signal having this second identification information. For example the line, "The microcontroller 122 causes the vehicle 12 to operate in the inactive but powered state when **the address of the vehicle 12 has been entered into the random access memory 126** as a result of the disposition of the key 150d in the socket 154. In the inactive but powered state, **the vehicle 12 is capable of receiving** from any of the pads 42a, 42b, 42c and 42d **the**

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address entered into the random access memory 126. When the vehicle 12 receives **this address** from an individual **one of the pads** 42a-42d, **it operates** in accordance with **commands received from such individual** one (e.g. the pad 42b) of the **pads**.” (col.14, lines 59-67 and col.15, lines 1-2).

Regarding claim 12, Barton further teaches, the discrimination device determines whether the remote control conducted by the transmitter that has transmitted the second identification information is allowed, on the basis of information based on the characteristic information stored in the own storage device and the received second identification information (col.11, lines 15-22 and col.14, lines 59-67).

- Claims 1-3, 5-9, 13-16 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barton 5,888,135 in view of Nishiyama 2003/0060287.

Regarding claim 1, Barton teaches the following claimed limitations, a remote control system comprising a transmitter and a movable machine remote-controlled on the basis of a control signal transmitted from the transmitter (FIG 1, labels 64 and 12 and col.1, lines 8-15), and discriminating at least one combination of the transmitter and the movable machine to be controlled by the transmitter on the basis of first identification information included in the control signal transmitted from the transmitter (col.5, lines 53-65), wherein the remote control system comprises a recording medium having characteristic information associated with the movable machine recorded thereon, the characteristic information including second identification information specifying the movable machine, (FIG 3, label 96/98 and col.8, lines 30-38), the transmitter comprises a characteristic information recognition device for recognizing the

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characteristic information concerning the movable machine to be controlled, recorded on the recording medium (col.8, lines 59-67), and a second identification information transmission device for transmitting the second identification information obtained by the recognized characteristic information (FIG 3, label 68), and the movable machine comprises a storage device for storing the characteristic information including second identification information associated with itself (FIG 4, labels 124/126), a discrimination device for determining whether remote control conducted by the transmitter that has transmitted the second identification information is allowed, on the basis of the received second identification information and the second identification information stored in the storage device (FIG 4, labels 128-132 and also col.14, lines 59-67), and a remote control prohibition device responsive to discrimination that the remote control is not allowed, for prohibiting the remote control by the transmitter that has transmitted the second identification information, irrespective of whether the combination based on the first identification information is established (col.10, lines 10-15).

However, Barton does not teach the remote control system having a recording medium existing independently of the transmitter and the movable machine.

Nishiyama discloses a game machine and a game system invention that teaches, a remote control system having a recording medium existing independently of the transmitter and the movable machine (FIG 4, labels 1 and 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to

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insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Regarding claim 2, Barton in view of Nishiyama teaches the claimed limitations as discussed above.

Nishiyama further teaches, the recording medium is detachably attached to the transmitter (Para.0083, lines 1-5).

Therefore, for the same reason stated above, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Barton in view of Nishiyama teaches the claimed limitations as discussed above. Barton further teaches,

Regarding claim 3, writing into the recording medium is not conducted by users (FIG 3, label 96),

Regarding claim 5, the movable machine comprises a remote control enabling device for enabling the movable machine to be remote-controlled on the basis of the first identification information after the discrimination device has judged the remote control to be allowed (col.10, lines 51-67),

Regarding claim 6, the movable machine comprises a discriminant for determining whether the movable machine should operate on the basis of the control signal, and the remote control enabling device enables the remote control on the basis of the first identification information, by controlling the discriminant (col.10, lines 19-30),

Regarding claim 7, a transmitter excluding device for disabling the remote control conducted by another transmitter except for the transmitter enabled first by the discrimination device, even if the other transmitter is the transmitter to control the movable machine on the basis of the first identification information (col.11, lines 14-22),

Regarding claim 8, the transmitter excluding device disables the remote control conducted by the other transmitter, by using information based on transmission timing of the control signal transmitted by the transmitter (col.11, lines 14-22),

Regarding claim 9, the characteristic information comprises information concerning control laws characteristic to the movable machine associated with the characteristic information, and the transmitter comprises a control signal transmission device for creating a control signal based on the control laws and transmitting the created control signal (col.6, lines 9-21).

Regarding claim 13, Barton teaches the following claimed limitations, a transmitter for remote-controlling a movable machine combined as a control object with the transmitter subject on the basis of first identification information (FIG 1, labels 64 and 12 and col.5, lines 53-65), the transmitter comprising a characteristic information recognition device for recognizing characteristic information of the movable machine recorded on a recording medium (FIG 3, label 96/98 and col.8, lines 30-37), and a

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second identification information transmission device for transmitting second identification information obtained by the recognized characteristic information, the second identification information specifying the movable machine to be controlled (see FIG 3, label 68 and col.8, lines 51-58).

However, Barton does not teach, the recording medium existing independently of the transmitter and the movable machine.

Nishiyama teaches, a recording medium existing independently of the transmitter and the movable machine (FIG 4, labels 1 and 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Regarding claim 14, Barton teaches the following claimed limitations, a remote control system comprising a transmitter and a movable machine remote-controlled on the basis of a control signal transmitted from the transmitter (FIG 1, labels 64 and 12 and col.1, lines 8-15), wherein the remote control system comprises a recording medium having characteristic information associated with the movable machine recorded thereon, the characteristic information including movable machine specification information specifying the movable machine (see FIG 2, labels 96/98 and col.8, lines 30-38), the transmitter comprises a characteristic information recognition

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device for recognizing the characteristic information associated with the movable machine to be controlled (col.8, lines 59-67), and a movable machine specification information transmission device for transmitting movable machine specification information obtained by the recognized characteristic information (FIG 3, label 68) and the movable machine comprises a storage device for storing the characteristic information including movable machine specification information associated with itself (FIG 4, labels 124/126), a discrimination device for determining whether remote control conducted by the transmitter that has transmitted the movable machine specification information is allowed, on the basis of the received movable machine specification information and the movable machine specification information stored in the storage device (col.10, lines 19-30 and col.14, lines 59-67); and a remote control prohibition device responsive to discrimination that the remote control is not allowed, for prohibiting the remote control by the transmitter that has transmitted the movable machine specification information (col.10, lines 10-15).

However, Barton does not teach, the recording medium existing independently of the transmitter and the movable machine.

Nishiyama discloses a game machine and a game system invention that teaches, a remote control system having a recording medium existing independently of the transmitter and the movable machine (FIG 4, labels 1 and 20).

Therefore here also, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to

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allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Regarding claim 15, Barton in view of Nishiyama teaches the claimed limitations as discussed above.

Nishiyama further teaches, the recording medium is detachably attached to the transmitter (Para.0083, lines 1-5).

Therefore as already stated above, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Regarding claim 16, Barton in view of Nishiyama teaches the claimed limitations as discussed above.

Barton further teaches, the characteristic information comprises information concerning control laws characteristic to the movable machine associated with the characteristic information, and the transmitter comprises a control signal transmission device for creating the control signal based on the control laws and transmitting the created control signal (col.5, lines 53-65 and col.6, lines 9-21).

Regarding claim 20, Barton teaches the following claimed limitations, a transmitter for remote-controlling a movable machine (FIG 3, label 64), the transmitter

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comprising a characteristic information recognition device capable of recognizing characteristic information of the movable machine recorded on a recording medium (FIG 3, labels 96/98 and col.8, lines 11-17), and an identification information transmission device for transmitting identification information obtained by the recognized characteristic information, the identification information specifying the movable machine to be controlled (FIG 3, label 68 and col.8, lines 11-17).

Barton does not teach, the recording medium existing independently of the transmitter and movable machine.

Nishiyama teaches, a recording medium existing independently of the transmitter and the movable machine (FIG 4, labels 1 and 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the invention of Barton in view of Nishiyama by incorporating a detachable cartridge to the remote control in order to allow players to insert different game cartridges that have different game programs so that one can use the same system for multiple different types of games without the need to change the system.

Response to Arguments.

4. Applicant's arguments filled on 07/29/2008 have been fully considered. In the remarks, the Applicant argues that,

(1) According to the present invention, basically the movable machine is remote-controlled by the transmitter based on the control signal including the first identification information. In such conventional systems, the movable machine identifies the

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transmitter to be combined with itself by identifying the first identification information included in the received control signal. In contrast, the present invention provides other identification information, that is, the second identification information.

The second identification is information specifying a movable machine, and is included in the characteristic information stored in the movable machine specified by the second identification information and the recording medium associated with the movable machine. The transmitter recognizes and transmits the second identification information recorded on the recording medium.

The movable machine determines whether the remote-control is allowed to control it or not on the basis of the received second identification information and the second identification information of itself.

Therefore, it is possible for the movable machine to allow to be remote-controlled only by the transmitter which has transmitted the second identification information coincident with the second identification information of itself. Moreover, as the recording medium is independent of the transmitter and the movable device, the player has to obtain the recording medium associated with the movable machine to be controlled. In other words, only the player who obtains the recording medium is allowed to remote control the movable machine associated with the recording medium.

Accordingly, if the recording medium is provided for value to the player, it is possible to realize the remote control system in which allows only a player who has bought the recording medium to enjoy the remote control system.

In Yevetz, there are two kinds of identification information for identifying the

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vehicles. One is the frequency for transmitting command signals from the controller (col. 3 lines 25-28) and the other is the vehicle ID included in the command signal (col. 4 lines 55-58). Each vehicle ID is given uniquely to each vehicle. Therefore, the vehicle ID can correspond to the first identification information of the present invention. In contrast to the presently claimed invention, the frequency in Yevetz is set by the second two position switch 64, which is mounted to the controller. Yevetz fails to disclose and teach that the frequency is set by the information obtained from the construction, independent of the controller and the vehicle. Moreover, although four vehicles are prepared, only two kinds of frequencies are prepared in Yevetz, because the two kinds of frequencies are prepared for the two controllers. Therefore, the frequency is information specifying the controller, rather than specifying the vehicle.

On the other hand, the Examiner can take the position that the frequency in Yevetz corresponds to the first identification information of the present invention, and the vehicle ID in Yevetz can correspond to the second identification information of the present invention. However, Yevetz only discloses that the vehicle ID is set by depression of one of the push-button switches 42, 44, 45 and 48 (col. 4 lines 55-58). Yevetz fails to disclose and teach that the controller obtains the vehicle ID of the vehicle to be controlled from a recording medium existing independently of the controller and the vehicle.

Thus, regardless of the interpretation of Yevetz, neither discloses all of the elements of the claimed invention.

Nishimura discloses a cartridge independent of the portable game machine

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(corresponding to the transmitter), and the mini car (corresponding to the movable machine). The portable game machine can read out information from the cartridge ([0045]-[0047]). However, Nishimura fails to disclose and teach identification information for specifying each mini car. Nishimura does not have any conception that the game machine obtains identification information for specifying the mini car to be controlled among the plurality of cars.

Moreover, both Yevetz and Nishimura are silent regarding discriminating by using the second identification information, a player to be allowed to enjoy the remote control based on the first identification information.

Therefore, even if Yevetz and Nishimura are combined, even a conception of selecting a player who can enjoy the remote control based on the first identification information by using the second identification information is never derived from the combination. Accordingly, it is impossible to derive from the references the second identification information, and thus it is believed the current application is in allowable condition.

Note :- In this response to argument section, any discussion related to a given claim also applies to claims that are directly or indirectly dependent to this claim.

- In response to argument (1), the Examiner respectfully disagrees. First of all, the first section of *Argument (1)* appears to be a piecemeal analysis (attacking a single reference), even though obviousness analysis is based on the combination of the references. The Examiner has already indicated in the previous office action that the Yevetz's invention does not positively teach *a transmitter having a recording medium on*

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which characteristic information associated with movable machine recorded thereon.

The Nishiyama's reference has been cited to teach this claimed feature that Yevetz's invention fails to teach in the previous office action.

Note that even with the presently amended claim feature, *the recording medium existing independently of the transmitter and the movable machine*, the Nishiyama's reference still teaches this claimed feature. For example, figure 4, label 1 of Nishiyama's invention teaches the portable game machine (i.e. the remote controller or transmitter) having a removable cartridge labeled 20 (i.e. *a recording medium existing independently of the transmitter and the movable machine*). This is further supported by the line, "First, each game player **detaches** the **cartridge 20** used for the **first game** from the **portable game machine 1** and instead **attaches a second-game cartridge 20a** for playing the second game to the connector **in the portable game machine 1.**", (Para.0083, lines 1-5) clearly establishes the fact that this recording medium is existing independently of the *transmitter* and the *movable machine*.

Of course, Yevetz's invention in view of Nishiyama's invention does not explicitly teach the *characteristic information including second identification information specifying the movable machine*. It is clear from the teachings of Nishiyama that **information data** stored in the cartridge is transmitted to the minicar during playing. For instance the line, "The second-game cartridge 20a has almost the same function as the cartridge 20 shown in FIG. 2 and ROM of the second-game **cartridge 20a stores a second-game program** for receiving game player's manipulation of the controller 6 and **transmitting information data** to the minicar 30 in response to the manipulation of the

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controller 6.” (Para.0083, lines 5-10), teaches the remote controller (i.e. the transmitter) transmitting information data stored in the cartridge (recording medium). Of course, as it has already been indicated, this teaching does not explicitly specify if this information includes *identification information specifying the minicar (i.e. the movable machine)*.

However, storing characteristic information of a movable machine in a recording medium where the characteristic information includes identification information specifying the given movable machine, and transmitting this information to the movable machine using a transmitter is old and well known in the art at the time of Applicant's invention was made. This is evident from Barton's invention as already indicated in the above section (*Claim Rejections - 35 USC § 103*), and the interpretation is further discussed below.

For example the line, “The **central station 64** then formulates in binary form a composite **address identifying** the pad 42a and **the selected one of the vehicles 12, 14, 16 and 17** and **stores** this **composite address** in the **random access memory 98** .
...

When the radio frequency **transmitter 104** receives the enabling signal on the line 106 and the address and data signals on the line 102, the antenna 68 (also shown in FIG. 1) **transmits signals to all of the vehicles 12, 14, 16 and 17**. However, **only the individual one of the vehicles 12, 14, 16 and 17 with the address indicated in the packet of signals** from the central station 64 **will respond** to such packet of signals.” (col.8, lines 30-33 and lines 51-58), clearly teaches the claimed feature that the combination of Yevetz's teaching and Nishiyama's teaching fail to explicitly teach. Note

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that in the above teaching, the central station is the transmitter (see also FIG 3, labels 64 and 104), and the **binary address** is the *identification information specifying the movable machine*. It is also clear that the **random access memory** (where these binary addresses are stored) is the *recording medium*.

Therefore, the Examiner concludes that, it would have been obvious to one of ordinary skill in the art at the time of the invention was made for example to modify the invention of Yevetz in view of Nishiyama by incorporating the **binary address** of the minicar (*identification information specifying the movable machine*) into the memory, as already taught by Barton's invention, so that a game program that is suitable to the capability of a given minicar would be stored in the memory along with the address of the minicar (e.g. a game that is suitable for a *tank* has the *address of the tank*, whereas a game that is suitable for a *truck* has the *address of the truck*), thereby enabling the player to activate only the minicar whose address corresponds to the address stored in the memory of the game cartridge.

- In response to Argument (general), with regard to the rest of the claims, the Applicant indicated that both Yevetz and Nishiyama fail to disclose and suggest that the controller (portable game machine) obtains the vehicle (mini car) specifying information from a recording medium existing independently of the controller and the vehicle.

However, as already discussed above (response to Argument (1)), Barton's invention does teach or suggest the claimed feature that Yevetz in view of Nishiyama fails to teach, and for the reasons discussed above, the Examiner concludes that the

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Applicant's current invention would have still been obvious to one of ordinary skill in the art at the time of the invention was made in view of the prior arts.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruk A. Gebremichael whose telephone number is (571) 270-3079. The examiner can normally be reached on Monday to Friday (7:30AM-5:00PM) ALT. Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on (571) 272-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruk A Gebremichael/
Examiner, Art Unit 3714
/XUAN M. THAI/

Supervisory Patent Examiner, Art Unit 3715

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